

Malayan Membracidae.

W. D. FUNKHOUSER.

(Contribution from the Entomological Laboratory of
Cornell University.)

Through the courtesy of Professor C. F. Baker, Dean of the College of Agriculture at Los Banos, Philippine Islands, I have been permitted to study a very interesting series of insects of the family Membracidae collected during the Summer of 1917 at Singapore and the Island of Penang.

The collection contains twelve new species and records of a number of species of Walker, Distant, Melichar and Bierman which form a valuable addition to our knowledge of the distribution of the Indian homopterous fauna.

All of the species listed were collected by Professor Baker.

1. *Xiphistes orientalis*, sp. nov.

Uniform reddish-brown; thick bodied; horns heavy and blunt; tegmina opaque; scutellum largely exposed.

Head dark brown with faint median ferruginous line, rugous, closely and finely punctate, sparingly pubescent with brownish hairs; eyes large, prominent, grayish-white; ocelli prominent, pearly, about equidistant from each other and from the eyes and situated on a line drawn through centers of eyes; clypeus much longer than wide, extending for more than half its length below inferior margin of face, pubescent, tip rounded.

Prothorax black-brown, rough, very pubescent with short, reddish-brown hairs which almost entirely conceal the weak punctuation; humeral angles very large, heavy, triangular and blunt, projecting directly laterad; suprahumeral horns short, very stout, about as long as their width at base and about as far apart at their bases as the basal width of one horn, projecting upward, outward and slightly forward, upper surfaces very rough and nodulose with irregular carinae, tips blunt, rounded and somewhat deflexed; median carina strongly percurrent; posterior process long, almost straight, slightly deflexed at tip, strongly centrally carinate, base laterally carinate on each side, tip gradually acute and extending about half way between internal angles and tips of tegmina, base only lightly touching scutellum; scutellum plainly visible on each side.

Sides of thorax thickly pubescent with reddish hairs. Tooth of prothorax very prominent; that of mesothorax very weak.

Tegmina opaque, reddish-brown, slightly pubescent and punctate at base, veins prominent, tip acute, marginal border very narrow or lacking. Hind wings with four apical areas.

Undersurface of body very dark brown, almost black. Ovipositor black. Ventral surface of abdomen somewhat pubescent with whitish tomentose patches at base.

Legs dark brown; femora swollen and smooth; tibiae triangular and finely spined; tarsi ferruginous.

Length 8 mm.; width between extremities of suprahumeral horns 4 mm.

Type: female (Baker's duplicate No. 9084).

Locality: Singapore.

2. *Centrochaes horrificus*, Westwood.

1837.	<i>Centrotus horrificus</i>	Westw. Proc. Zool. Soc. 130.
1841.		Guer. Mag. Zool. Ser. 2. III. Ins. Pl. 82.
1842.		Lefebvre Ann. Soc. Fr. Bull. 1842. p. xxi.
1851.	<i>Pterygia horrificus</i>	Walker List Hom. Brit. Mus. 500. 9.
1852.		Walker List Hom. IV. Tab. 4. figs. 4 and 5.
1866.	<i>Centrochaes horrificus</i>	Stal Analect. Hem. 386.
1870.		Stal Hem. Phil. 731. 1.
1903.	<i>Pterygia horrificica</i>	Buckt. Mon. Memb. 73. Pl. 12. fig. 5.
1903.	<i>Pterygia spinula</i>	Buckt. Mon. Memb. 73. Pl. 12. fig. 4.
1903.	<i>Centrochaes horrificus</i>	Buckt. Mon. Memb. 266.
1914.		Funkh. Journ. Ent. & Zool. VI: 2. p. 69. 6.
1915.		Dist. Ann. Mag. Nat. Hist. 16: 94. p. 327.
1915.		Funkh. Rev. Phil. Memb. 370.
1918.		Funkh. Notes Phil. Memb. 23.

One specimen taken at Singapore and bearing Baker's duplicate No. 8779. Apparently this species has a wide distribution throughout eastern Asia and the East Indies. The variation shown in examples studied does not warrant the splitting up of the species.

3. *Leptocentrus leucaspis*, Walker.

1858. *Centrotus leucaspis* Walk. List. Hom. B. M. Suppl. 158.
 1903. *Leptocentrus leucaspis* Buckt. Mon. Memb. 235. Pl. 53. figs. 3a, b.
 1907. Dist. Fauna Brit. Ind. 30. 2139.
 1915. Funkh. Rev. Phil. Memb. 379.
 1918. Funkh. Notes Phil. Memb. 37.

One specimen bearing Baker's duplicate No. 8771 taken at Singapore.

4. *Leptocentrus obortus*, Distant.

1916. *Leptocentrus obortus* Dist. Fauna Brit. Ind. App. 154. 3347.

Two specimens (Baker's duplicate numbers 8772 and 8976) collected at Singapore.

5. *Leptocentrus longispinus*, Distant.

1907. *Leptocentrus longispinus* Dist. Fauna Brit. Ind. 31. 2141.

One male and three females all collected at Singapore.

6. *Centrotypus asmodeus*, Distant.

1907. *Centrotypus asmodeus* Dist. Fauna Brit. Ind. 36. 2150.
 One female (Baker's duplicate No. 8978) taken at Singapore.

7. *Nilautama minutispina*, sp. nov.

Black, punctate, pubescent; posterior process very short and slender; tegmina smoky-hyaline, wrinkled; eyes red; scutellum white tomentose.

Head twice as broad as long, black, finely punctate, densely pubescent with short golden hairs; base sinuate; eyes red; ocelli not prominent, gray, equidistant from each other and from the eyes and situated on a line above centers of eyes; clypeus twice as long as wide, extending for two-thirds its length below the inferior margin of the face, tip pubescent and rounded.

Prothorax narrow, black, finely punctate, sparingly pubescent with golden hairs; metopidium narrow, much sunken below supra-humeral horns; humeral angles short, blunt, not prominent; supra-humeral horns strong, very wide as seen from above, extending almost directly outward, somewhat upward and slightly backward, triquerate, tips blunt and recurved; posterior process very slender and short, extending not farther than tip of scutellum, arising well above base of pronotum, tricarinate, acute, nearly straight, tip

very slightly upraised. Scutellum entirely exposed, triangular, as long as its width at base; base thickly covered with white tomentose pubescence; tip rounded in general outline, notched with the point on each side of notch extended into a fine tooth.

Tegmina long, narrow, smoky-hyaline, much wrinkled; base white and punctate; costal margins ferruginous; veins prominent, somewhat hairy; tips rounded, extending well beyond extremity of abdomen.

Sides and undersurface of the thorax white tomentose; undersurface of abdomen brown.

Legs reddish-brown, slender, hairy; tarsi flavous.

Length 7 mm.; width between tips of suprahumeral horns 4 mm.

Type: female (Baker's duplicate No. 9086).

Locality: Island of Penang.

8. *Anchonoides variegatus*, sp. nov.

Golden brown with white tomentose stripes; tegmina smoky-hyaline with broad, clear band across centers and with bases brown; posterior process strongly sinuate with two elevations behind suprahumeral horns.

Head wider than long, rugose, brown with white tomentose patches, finely and closely punctate, densely pubescent; base sinuate; eyes brown, reflexed; ocelli prominent, brown, farther from each other than from the eyes and situated above a line passing through centers of eyes; clypeus much longer than wide, sublobate, extending for more than two-thirds its length below the inferior margin of the face, densely white pubescent, tip rounded; inferior margins of genae produced in blunt angles; antennae prominent.

Prothorax brown, finely punctate, sparingly pubescent; metopidium somewhat nodulate; four white tomentose lines on cephalic prothorax, one arising above each eye, extending dorsomesad to meet the line from the other side at the median carina at a point about even with the bases of the suprahumeral horns; another originating beneath each humeral angle and extending upward between the suprahumeral horns and backward to base of posterior process; a narrower line extending along lateral margin of pronotum from beneath the suprahumeral horn to base of posterior process. Humeral angles prominent, blunt, triangular, extending outward about half as far as the suprahumeral horns. Suprahumeral horns heavy, sinuate, extending outward and a little upward, upper middle portion much elevated and nodulate, tips obliquely truncate with posterior angle produced. Median carina strongly percurrent. Posterior process heavy, nodulate, thrown upward in two strong loops, one above the scutellum and one above the internal angles of the tegmina, the anterior elevation about twice as high as the

posterior; tip extending almost as far as the end of the abdomen but not reaching the extremities of the tegmina. The entire dorsal outline as seen from the side showing three elevations, one between the suprahumeral horns, one above the scutellum and one above the internal angles of the tegmina. Scutellum entirely exposed, sinuate, white tomentose, tip truncate.

Tegmina divided into four color areas, the transverse bands being about equal in length. The base is brown, entirely opaque, punctate and slightly pubescent; the second band is smoky-hyaline; the third band entirely clear; the remainder of the tegmen amber-hyaline. The veins are prominent, those in the apical area somewhat nodulate.

Sides and undersurface of thorax uniform dark brown with white tomentose patches; tibiae ferruginous shading to flavous at distal extremities; tarsi flavous.

Length 5 mm.; width between tips of suprahumeral 4 mm.

Type: female (Unique type in Professor Baker's collection).

Locality: Singapore.

This species shows a much higher posterior elevation on the posterior process and much shorter and less elevated suprahumeral horns than *A. typicus* Distant, the type of the genus.

9. *Ebhul varius*, Walker.

1858.	<i>Centrotus varius</i>	Walk. List Hom. Brit. Mus. Suppl. 162.
1869.	<i>Leptobelus varius</i>	Stal Bid. Memb. Kan. 285. 6.
1885.		Atkins J. A. S. B. 54. p. 82.
1907.	<i>Ebhul varius</i>	Dist. Fauna Brit. Ind. 59. 2189.
1914.		Lamborn Trans. Ent. Soc. Lond. 1913. p. 470.
1915.		Funkh. Rev. Phil. Memb. 393.
1916.		Dist. Fauna Brit. Ind. App. p. 169.

Five specimens, all females. Two taken at Singapore and three collected from the Island of Penang.

10. *Sipylus dilatatus*, Walker.

1851.	<i>Centrotus dilatatus</i>	Walk. List Hom. B. M. 630. 74.
1914.	<i>Sipylus nodipennis</i>	Funkh. Journ. Ent. & Zoo. VI: 72. 15. fig. 5.
1915.		Funkh. Rev. Phil. Memb. 392. Pl. 2. fig. 15.

1916. *Sipylus dilatatus* Dist. Rhynchotal Notes. 330.

1918. Funkh. Notes Phil. Memb. 29.

Two females and one male, all from Singapore.

11. ***Tricentrus assamensis***, Distant.

1907. *Tricentrus assamensis* Dist. Fauna Brit. Ind. 57. 2186.

Three specimens, all females. Two from the Island of Penang and one from Singapore.

12. ***Tricentrus albomaculatus***, Distant.

1907. *Tricentrus albomaculatus* Dist. Fauna Brit. Ind. 56. 2183.

1914. Kershaw Ann. Soc. Belg. 37. 191-201 pp. figs. 1-13.

1916. Dist. Fauna Brit. Ind. App. 166.

Four specimens. One female from the Island of Penang; one female and two males from Singapore.

13. ***Tricentrus resectus***, Distant.

1916. *Tricentrus resectus* Dist. Fauna Brit. Ind. App. 167. 3370.

Three specimens. One male and one female from Singapore; one female from the Island of Penang.

14. ***Tricentrus gibbosulus***, Walker.

1858. *Centrotus gibbosulus* Walker Ins. Saund. 80.

1886. Atkins J. A. S. B. 55. p. 198.

1906. Oshan. Pal. Hem. 43. 159.

1907. *Tricentrus gibbosulus* Dist. Fauna Brit. Ind. 53. 2178.

1914. Funkh. Journ. N. Y. Ent. Soc. XXII: 3. 238.

1916. Dist. Fauna Brit. Ind. App. 167.

Six specimens. Three males from Singapore; two males and one female from the Island of Penang.

Walker described a second *Centrotus gibbosulus* in 1868 (Journ. Linn. Soc. Zoo. X: 187) which Distant has made the type of his new genus *Maurya* (Ann. and Mag. Nat. Hist. Ser. 8. Vol. 17. p. 326. April, 1916).

15. ***Tricentrus spinicornis***, sp. nov.

Black, punctate, pubescent; suprahumeral horns thin, sharp and spinelike; posterior process extending beyond tip of abdomen; tegmina fuscous-hyaline, base black; legs brown.

Head broader than long, black, densely pubescent with silvery hairs which conceal the fine punctuation; base sinuate, much higher in middle; eyes prominent, black-brown; ocelli prominent, amber-colored, shining, glassy, somewhat farther from each other than from the eyes and situated slightly above a line drawn through centers of eyes; clypeus about as broad as long, projecting for about half its length below inferior margin of face, tip rounded and very hairy.

Prothorax uniform black, finely punctured, thickly pubescent with silvery hairs; humeral angles weak, triangular, blunt; suprahumeral horns long, slender, sharp, ridged, extending about equally upward and outward and slightly turned backward at tips, distance between bases 1.7 mm., upper surface of horn centrally longitudinally carinate; median carina percurrent; posterior process long, gradually acuminate, tricarinate, extending slightly beyond tip of abdomen and well beyond internal angles of tegmina.

Tegmina fuscous-hyaline, base black and punctate, costal margin somewhat pubescent, veins prominent.

Undersurface of body very dark brown, almost black. Legs light brown; tibiae finely spined; hind trochanters armed with strong teeth.

Length 6 mm.; width between tips of suprahumeral horns 5 mm.

Type: female (Baker's duplicate No. 8775). Type in author's collection; two paratypes in Professor Baker's collection.

Locality: Singapore.

Three specimens were examined, all females. Two were from Singapore and one from the Island of Penang.

16. *Tricentrus brunneus*, sp. nov.

Near the preceding but smaller and differing particularly in the size and shape of the suprahumeral horns.

Uniform golden brown, finely punctate and pubescent with silvery hairs; suprahumeral horns short, blunt, tricarinate; posterior process reaching tip of abdomen: tegmina smoky-hyaline with base black.

Head wider than long, brown, completely covered with fine white pubescence; base rounded; eyes very large, prominent, brown; ocelli protruded, pearly, about equidistant from each other and from the eyes and situated slightly above an imaginary line drawn through centers of eyes; clypeus very long, projecting for almost its entire length below inferior margin of face, tip covered with long, straight, white hairs; inferior margin of face only slightly sinuate, almost truncate; antennae very slender.

Prothorax uniform brown, finely punctate, closely pubescent with short silvery hairs; humeral angles prominent, triangular, extending outward almost half as far as the suprahumeral horns; suprahumeral horns short, slender, tips blunt, anterior, dorsal and posterior surfaces carinate, extending outward and upward, about as far apart at bases as the length of one horn; posterior process long, slender, straight, extending almost to tip of abdomen, closely impinging on scutellum, tip darker.

Tegmina smoky-hyaline, wrinkled, base black-brown and punctate, veins prominent, slight dark brown marking at apicalcostal margin.

Undersurface of body very dark brown, almost black. Hind trochanters armed with strong teeth. Legs uniform light brown; femora smooth; tibiae triquerate and bearing at edges fine spines.

Length 5.5 mm.; width between extremities of suprahumeral horns 3.5 mm.

Type: female (Baker's duplicate No. 8774).

Locality: Singapore.

17. *Tricentrus truncaticornis*, sp. nov.

Short, heavy-bodied, black; pronotum as seen from above about as broad as long; suprahumeral horns very long, equal in width throughout length, tips squarely truncate; tegmina ferruginous-hyaline, bases black, veins slightly nodulate.

Head much wider than long, black, thickly punctate, closely pubescent; base strongly sinuate; eyes white tinged with reddish which makes them very prominent as compared with the black head and body; ocelli pearly, about equidistant from each other and from the eyes and situated slightly above a line passing through centers of eyes; clypeus as wide as long, tip rounded and practically continuing the sinuate inferior marginal outline of the face.

Thorax black; punctate, sparingly pubescent; metopidium wider than high; humeral angles very inconspicuous, almost hidden under the large suprahumeral horns; suprahumeral horns long, broad, flattened, as far apart at their bases as the width of the head, longitudinally striate above, tips squarely cut off at right angles leaving a truncate end as wide as the base; posterior process short, barely reaching internal angles of tegmina, base wide, extremity suddenly narrowed to form an acute tip.

Tegmina ferruginous-hyaline, so wrinkled between veins as to be almost opaque; base black and punctate; veins prominent and bearing scattered nodules.

Legs and undersurface of body uniform black with scattered pubescence. Hind trochanters armed with strong, prominent teeth.

Length 6 mm.; width between extremities of suprahumeral horns 6 mm.

Type: female (Baker's duplicate No. 8773).

Locality: Singapore.

The foregoing species is close to *T. auritus* which Buckton described as *Otaris auritus* from Sumatra (Buckton. Monograph of the Membracidae, p. 429. Pl. 59. figs. 1, 1a. 1903), but differs decidedly in size and in the comparative proportions of the suprahumeral horns and the posterior process.

18. **Centruchus laticornis**, sp. nov.

Resembling the preceding species in general appearance but differing in having unarmed hind trochanters which I believe is a sufficient generic character to distinguish the genera *Tricentrus* and *Centruchus* which are in other respects very similar.

Body subtriangular; suprahumeral horns broad and flat with truncate tips; posterior process short and narrow; tegmina ferruginous with faint median white band; entire body largely marked with white tomentose patches.

Head wider than long, black, rugose, finely punctate, sparingly pubescent; base regularly and evenly rounded; eyes prominent, brown; ocelli conspicuous, pearly, a little farther from each other than from the eyes and situated well above a line passing through centers of eyes; clypeus longer than wide, trilobed at apex, extending well below the inferior margin of the face, tip rounded and bearing long, stiff, white hairs.

Prothorax black, finely punctate, sparingly pubescent, decorated with irregular white tomentose patches; metopidium much broader than high; humeral angles weak, triangular, inconspicuous; suprahumeral horns long, broad, flattened dorsoventrally, tips squarely truncate, dorsal surface with longitudinal carina slightly behind middle, horns about as far apart at bases as the width of the head; median carina percurrent; posterior process short, uniformly narrow, tricarinate, largely tomentose, tip acute, extending just to the internal angles of the tegmina; scutellum broad, notched, tomentose.

Tegmina ferruginous, wrinkled, subopaque; base brown and punctate; a faint whitish band extending across the central part of tegmina just below the tip of the posterior process; veins prominent and slightly nodulose in apical region.

Undersurface of body black with white tomentose patches. Legs uniformly light ferruginous brown.

Length 6 mm.; width between extremities of suprahumeral horns 6 mm.

Type: female (Unique type in Professor Baker's collection).
 Locality: Singapore.

19. **Gargara piceola**, Melichar.

1903. *Gargara piceola* Melich. Hom. Ceylon 122. 1.
 1907. Dist. Fauna Brit. Ind. 60. 2190.
 One female from Singapore.

20. **Gargara rubrogranulata**, Bierman.

1910. *Gargara rubrogranulata* Bier. Notes Mus. Leiden 33. 45.
 One female from Singapore.

21. **Gargara nitidipennis**, Funkhouser.

1914. *Gargara nitidipennis* Funkh. Jour. Ent. & Zoo. VI: 71.
 14.
 1915. Funkh. Rev. Phil. Memb. 399.
 1918. Funkh. Notes Phil. Memb. 32.

Three males and one female from Singapore; one male from the Island of Penang.

The species shows considerable minor variations but I can find no specific characters to separate the Malay material from the type specimens from the Philippine Islands.

22. **Gargara projecta**, sp. nov.

Distinguished by the position of the head which is not deflexed or vertical as in most Membracidae but is projected well forward at the inferior margin.

Uniform brown, punctate, pubescent; head extending more or less forward, not deflexed; tegmina smoky-hyaline, very slightly brown and punctate at base.

Head projected, clypeus farther cephalad than base as seen from a side view, entire frontal outline of head continuing slope of metopidium; brown, smooth, thickly pubescent with fine, short, yellowish hairs; base weakly sinuate; eyes prominent and brown, their inferior margins continuing the almost straight line formed by the inferior margins of face and clypeus; ocelli not prominent, pearly, farther from each other than from the eyes and situated very slightly above an imaginary line passing through centers of eyes; clypeus swollen, convex in front, about as wide as long, tip rounded, somewhat hairy and continuing the general outline of the inferior margin of the face; antennae very thin and inconspicuous.

Prothorax uniform brown, punctate, pubescent; metopidium sloping, somewhat flattened, slightly rugose, broader than high as

seen from the front; humeral angles not prominent, smooth, blunt at tips; posterior process long, slender, gradually acuminate, carinate above with median ridge which does not extend over the metopidium, tip extending well beyond the internal angles of the tegmina, darker in color than the rest of process, slightly depressed; scutellum distinct on either side of posterior process but closely impinging upon it.

Tegmina uniform smoky-hyaline, wrinkled, base narrowly brown and punctate, veins prominent, tips rounded and extending just beyond the extremity of the abdomen.

Undersurface of body darker brown, pubescent. Legs the same color as the pronotum; hind trochanters unarmed; tibiae finely spined; tarsi shading to flavous; claws brown.

Length 5 mm.; width between extremities of humeral angles 2.3 mm.

Type: female.

Type locality: Singapore.

Described from six specimens: two females and two males from Singapore and one female and one male from the Island of Penang.

Type (Baker's duplicate No. 8981) and one paratype (No. 8979) in author's collection; allotype and three paratypes in Professor Baker's collection.

23. *Gargara penangi*, sp. nov.

Uniform brown; tegmina slightly mottled; posterior process narrow at base, swollen in middle and acute at apex; sides of thorax white tomentose.

Head much deflexed, as wide as long, brown, thickly covered with yellowish pubescence which almost entirely conceals the faint punctuation; base broadly sinuate; eyes large, prominent, mottled brown, extending almost as far lateral as humeral angles; ocelli prominent, shining, pearly, almost twice as far from each other as from the eyes and situated well above a line drawn through centers of eyes; inferior margin of face sinuate and projected; clypeus longer than wide, extending for half its length below inferior margin of face, tip broadened, rounded, very hairy; antennae very long and very slender.

Prothorax uniform brown, finely punctate, thickly pubescent with yellowish hairs; metopidium convex, slightly depressed above base of head; humeral angles prominent, sub-conical, blunt; highest part of pronotum above humeral angles almost flat; median carina not visible over front of pronotum; posterior process short, not reaching internal angles of tegmina, narrow and constricted at base, swollen and strongly carinate above in middle, suddenly narrowed to acute apex; scutellum well exposed, tomentose at base.

Tegmina amber-hyaline; base brown, punctate and pubescent; irregular brown fascia just behind internal angles.

Sides of head and thorax white tomentose; undersurface of thorax and abdomen brown; tip of ovipositor slightly ferruginous.

Legs brown, femora darker than tibiae which shade into flavous at distal ends; tarsi luteus; claws brown.

Length 4.5 mm.; width between tips of humeral angles 2.1 mm.

Type: female. Male somewhat smaller and darker.

Locality: Island of Penang.

Described from a pair from Penang. Type in Professor Baker's collection; allotype in author's collection.

24. *Gargara triangulata*, sp. nov.

Short, thick, heavy-bodied species; brown with white pubescence; pronotum almost triangular as seen from above; tegmina ferruginous, semi-opaque.

Head wider than long, brown, covered with dense white pubescence; base weakly sinuate; eyes large, prominent, brown; ocelli small, white, shining, glassy, farther from each other than from the eyes and situated well above a line passing through centers of eyes; inferior margined of genae sinuate; clypeus almost as broad as long, extending for half its length below inferior margin of face, tip broadly rounded and only slightly pubescent.

Prothorax uniform brown but so irregularly covered with long white pubescence as to give a fasciate appearance, very finely punctate; humeral angles prominent, swollen, triangular, tips blunt; posterior process heavy and short, extending just beyond internal angles of tegmina, lighter in color at base than at tip, strongly carinate above, tip blunt and slightly deflexed; median carina not extending forward over metopidium; metopidium swollen in front, nearly flat on top.

Tegmina uniform ferruginous, nearly opaque, much wrinkled, very hairy at base and along veins.

Sides of thorax densely pubescent; undersurface of thorax and abdomen brown; legs entirely brown.

Length 3.7 mm.; width between humeral angles 2.5 mm.

Type: female (Baker's duplicate No. 8782).

Type locality: Singapore.

Described from two females, one from Singapore and one from the Island of Penang. Type in author's collection; paratype in Professor Baker's collection.

25. **Gargara nervosa**, sp. nov.

Apparently near *G. venosa* Walker from the Celebes (Walker, Journ. Linn. Soc. Zool. X: 189. 1868) and *G. caelata* Distant from the Nilgiri Hills (Distant, Fauna British India App. 172. 3389. 1916).

Uniform brown, punctate, pubescent; tegmina mottled brown and white with veins very large and prominent.

Head wider than long; dark brown, closely punctate, finely pubescent; base irregularly sinuate; face sculptured; eyes large, brown; ocelli inconspicuous, amber-colored, about equidistant from each other and from the eyes and situated a little above a line drawn through centers of eyes; clypeus a little longer than wide, extending for more than half its length below inferior margin of face, tip truncate, slightly pubescent.

Prothorax brown, darker on metopidium and posterior process, closely and finely punctate, sparingly and irregularly pubescent; humeral angles weak, blunt; metopidium very convex as seen from above; median carina not percurrent but appearing only on the posterior process; posterior process short, extending just to the internal angles of the tegmina, slightly depressed at base, carinate above, tip blunt, dark and slightly depressed.

Tegmina hyaline, wrinkled; base brown and punctate; transverse brown fascia just behind base and another just below internal angles; veins very large, strong and prominent; tips more or less pointed, extending just beyond apex of abdomen.

Sides of thorax white tomentose; undersurface of body brown; legs brown.

Length 4.7 mm.; width between humeral angles 2.4 mm.

Type: female (Baker's duplicate No. 8980).

Locality: Singapore.

Described from two females, both from Singapore. Type in author's collection; paratype in Professor Baker's collection.

26. **Gargara sordida**, sp. nov.

Dark, heavy-bodied; tegmina more or less blackened; posterior process extending just to internal angles of tegmina; sides of thorax more or less tomentose.

Head wider than long, black, sculptured, finely and closely punctate, sparingly pubescent with golden hairs; base irregularly sinuate; eyes very large, brown; ocelli small, white, glistening, farther from each other than from the eyes and situated far above a line drawn through centers of eyes, almost as high as tops of eyes; inferior margins of genae regularly sinuate; clypeus longer

than wide, extending for nearly half its length below inferior margin of face, tip rounded, hairy.

Prothorax very dark brown, almost black, punctate, densely pubescent with golden hairs; humeral angles prominent, swollen, blunt; metopidium convex; posterior process short, heavy, blunt, extending just to internal angles of tegmina, carinate above, pubescent; median carina prominent on posterior process, very faint behind center of pronotum and not visible on metopidium.

Tegmina dark, translucent, wrinkled; base black and punctate; white tomentose patch of thorax showing through just behind base; dark brown fascia just beneath internal angles and dark brown patch behind apex of posterior process; veins strong and prominent.

Sides of thorax more or less white tomentose. Undersurface of body black. Legs brown.

Length 4.8 mm.; width between humeral angles 2.5 mm.

Type: female. Male considerable smaller and darker.

Locality: Singapore.

Described from two males and two females, all from Singapore. Type, allotype and one paratype in Professor Baker's collection; one paratype in author's collection.

27. *Periaman* sp.

One specimen from the Island of Penang which belongs to the genus *Periaman* and is apparently new. The specimen is, however, considerably mutilated and does not warrant being made the type of a new species.